

## WE CLAIM:

1. A pivot-and-positioning assembly for an electronic device that includes first and second parts, said pivot-and-positioning  
5 assembly comprising:

a pivot unit including

a mounting seat adapted to be secured to the second part, and

a rotatable member mounted rotatably  
10 on said mounting seat and adapted to be secured to the first part so as to permit rotation of the first part about a first axis relative to the second part between first and second positions; and

15 a positioning unit including

a first engaging member that is secured to said rotatable member and that has an engaging portion which rotates about said first axis along a circumferential trajectory upon  
20 rotation of the first part relative to the second part, and

a pair of second engaging members that are secured to said mounting seat and that are diametrically disposed on said  
25 circumferential trajectory, each of said second engaging members defining a retaining recess that opens at a tangential direction

relative to said circumferential trajectory in such a manner that said engaging portion of said first engaging member moves along said circumferential trajectory to be fittingly and  
5 releasably snapped into said retaining recess in one of said second engaging members so as to position the first part at the first position and that said engaging portion of said first engaging member moves along said  
10 circumferential trajectory to be fittingly and releasably snapped into said retaining recess in the other of said second engaging members so as to position the first part at the second position.

15 2. The pivot-and-positioning assembly of Claim 1, wherein each of said second engaging members includes an elastic C-shaped clasp secured to said mounting seat and defining said retaining recess, said first engaging member including  
20 a bolt that is secured to said rotatable member and that has a shank portion defining said engaging portion.

3. The pivot-and-positioning assembly of Claim 2, wherein said mounting seat includes a  
25 cylindrical member and a pair of first wings projecting outwardly and radially from said cylindrical member, each of said first wings

being formed with an arcuate slot that is defined by a slot-defining wall, and a pair of opposing retaining grooves that are formed in said slot-defining wall, said slot in each of  
5 said first wings opening at said tangential direction, said clasp of each of said second engaging members having two opposite ends and being retained in said arcuate slot in said slot-defining wall of a respective one of said  
10 first wings by insertng said ends of said clasp into said retaining grooves.

4. The pivot-and-positioning assembly of Claim 3, wherein said cylindrical member of said mounting seat confines an inner space and is  
15 formed with an annular first flange projecting radially and inwardly therefrom into said inner space, said rotatable member including a tubular element received rotatably in said inner space, an annular second flange  
20 projecting outwardly and radially from said tubular element and confronting said first flange, and a pair of second wings projecting outwardly and radially from said second flange and aligned respectively with said first wings,  
25 said bolt engaging threadedly one of said second wings, said pivot-and-positioning assembly further comprising a first

resistance-providing pad unit sandwiched between said first and second flanges.

5. The pivot-and-positioning assembly of Claim 4, wherein said second flange is disposed at one side of said first flange, said tubular element having a bottom end that is disposed at an opposite side of said first flange that is opposite to said second flange, said pivot-and-positioning assembly further comprising an annular third flange received in said inner space, secured to said bottom end of said tubular element, and confronting said first flange, and a second resistance-providing pad unit sandwiched between said first and third flanges.

6. The pivot-and-positioning assembly of Claim 5, wherein said rotatable member further includes a pair of opposing tubular parts that are adapted to be secured to the first part, and a pair of pivot pins that are respectively secured to said second wings and that extend respectively into said tubular parts so as to permit further rotation of the first part relative to the second part about said pivot pins that cooperatively define a second axis which is perpendicular to the first axis.

7. The pivot-and-positioning assembly of Claim

5, wherein said second resistance-providing pad unit includes elastic first and second pads, and an elastic third pad that is sandwiched between said first and second pads and that is formed with a plurality of bumps projecting therefrom and abutting against one of said first and second pads.

8. The pivot-and-positioning assembly of Claim 3, wherein each of said retaining grooves in said slot-defining wall of said slot in each of said first wings is defined by a groove-defining wall which has a closed end disposed inwardly of said slot-defining wall, said ends of said clasp having opposite end faces that are respectively disposed adjacent to said closed ends of said groove-defining walls of said retaining grooves and that are spaced apart from each other by a distance which is less than the distance measured from one of said closed ends to the other of said closed ends of said groove-defining walls.

9. A portable computer comprising:  
a display module;  
a main board module; and  
a pivot-and-positioning assembly including  
a pivot unit including

a mounting seat secured to said main board module, and

a rotatable member mounted rotatably on said mounting seat and secured to  
5 said display module so as to permit rotation of said display module about a first axis relative to said main board module between first and second positions, and

a positioning unit including  
10 a first engaging member that is secured to said rotatable member and that has an engaging portion which rotates about said first axis along a circumferential trajectory upon rotation of said display module relative  
15 to said main board module, and

a pair of second engaging members that are secured to said mounting seat and that are diametrically disposed on said circumferential trajectory, each of said  
20 second engaging members defining a retaining recess that opens at a tangential direction relative to said circumferential trajectory in such a manner that said engaging portion of said first engaging member moves along said  
25 circumferential trajectory to be fittingly and releasably snapped into said retaining recess in one of said second engaging members so as

to position said display module at the first position and that said engaging portion of said first engaging member moves along said circumferential trajectory to be fittingly and  
5 releasably snapped into said retaining recess in the other of said second engaging members so as to position said display module at the second position.

10. The portable computer of Claim 9, wherein  
10 each of said second engaging members includes an elastic C-shaped clasp secured to said mounting seat and defining said retaining recess, said first engaging member including a bolt that is secured to said rotatable member  
15 and that has a shank portion defining said engaging portion.

11. A pivot-and-positioning assembly for an electronic device that includes first and second parts, said pivot-and-positioning  
20 assembly comprising:

    a pivot unit including

        a mounting seat adapted to be secured to the second part, and

        a rotatable member mounted rotatably  
25 on said mounting seat and adapted to be secured to the first part so as to permit rotation of the first part about a first axis relative to

the second part between first and second positions; and

a positioning unit including

5 a first engaging member that is secured to said rotatable member and that rotates about said first axis along a circumferential trajectory upon rotation of the first part relative to the second part, and

10 a pair of second engaging members that are secured to said mounting seat and that are diametrically disposed on said circumferential trajectory so as to permit engagement between said first engaging member and one of said second engaging members when  
15 the first part rotates to the first position and engagement between said first engaging member and the other of said second engaging members when the first part rotates to the second position.